(1) 查看数据库列表

- 查看数据库：show databases;

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.00 sec)
```

(2) 创建数据库

- 创建数据库：CREATE {DATABASE} [IF NOT EXISTS] db-name [DEFAULT] CHARACTER SET [=] charset_name;
- 查看数据库详情：show create database db-name;
- 查看执行的错误信息：show warnings;
- 注意
  - 重复创建同名的数据库会抛出Error，加一下if not exists就可以避免
  - 数据库默认的编码是utf8

```
mysql> create database d1;
Query OK, 1 row affected (0.02 sec)

mysql> create database d1;
ERROR 1007 (HY000): Can't create database 'd1'; database exists
mysql> show warnings;
+-------+------+--------------------------------------------+
| Level | Code | Message                                    |
+-------+------+--------------------------------------------+
| Error | 1007 | Can't create database 'd1'; database exists |
+-------+------+--------------------------------------------+
1 row in set (0.00 sec)

mysql> create database if not exists d1;
Query OK, 1 row affected, 1 warning (0.00 sec)

mysql> show warnings;
+-------+------+--------------------------------------------+
| Level | Code | Message                                    |
+-------+------+--------------------------------------------+
| Note  | 1007 | Can't create database 'd1'; database exists |
+-------+------+--------------------------------------------+
1 row in set (0.00 sec)

mysql> create database d2 character set = gbk;
Query OK, 1 row affected (0.05 sec)

mysql> show create database d1;
+----------+--------------------------------------------------------------------------+
| Database | Create Database                                                          |
+----------+--------------------------------------------------------------------------+
| d1       | CREATE DATABASE `d1` /*!40100 DEFAULT CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_ai_ci */ |
+----------+--------------------------------------------------------------------------+
1 row in set (0.00 sec)

mysql> show create database d2;
+----------+----------------------------------------------------------------+
| Database | Create Database                                                |
+----------+----------------------------------------------------------------+
| d2       | CREATE DATABASE `d2` /*!40100 DEFAULT CHARACTER SET gbk */ |
+----------+----------------------------------------------------------------+
1 row in set (0.00 sec)
```

(3) 修改数据库

- 修改数据库：ALTER {DATABASE} db-name [DEFAULT] CHARACTER SET [=] charset_name;

```
mysql> alter database d1 character set = gbk;
Query OK, 1 row affected (0.04 sec)

mysql> show create database d1;
+----------+----------------------------------------------------------------+
| Database | Create Database                                                |
+----------+----------------------------------------------------------------+
| d1       | CREATE DATABASE `d1` /*!40100 DEFAULT CHARACTER SET gbk */ |
+----------+----------------------------------------------------------------+
1 row in set (0.00 sec)
```

(4) 删除数据库

- 删除数据库：DROP {DATABASE | SCHEMA} [IF EXISTS] db-name ;

```
mysql> drop database d1;
Query OK, 0 rows affected (0.07 sec)

mysql> drop database d2;
Query OK, 0 rows affected (0.04 sec)

mysql> drop database if exists d2;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> show warnings;
Empty set (0.00 sec)
```

(5) 打开数据库

- 打开数据库：use db-name；
- 查看当前所在数据库：select database();

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.00 sec)

mysql> use mysql;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select database();
+------------+
| database() |
+------------+
| mysql      |
+------------+
1 row in set (0.00 sec)

mysql> use sys;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select database();
+------------+
| database() |
+------------+
| sys        |
+------------+
1 row in set (0.00 sec)
```